

REMARKS

Claims 1-8 are pending in this application. Numerous claims are amended to place the claimed invention in a better condition for allowance.

Entry and allowance of all pending claims are respectfully requested.

Claim Rejections under 35 USC §102

Claim 5 is rejected under 35 USC §102(e) as being anticipated by U.S. Patent No. 5,703,765 (Preis '765).

Preis '765 describes a switch 12 closing to periodically connect source 11 to primary winding 21 of transformer 2 (FIG. 1), and a voltage U4 at terminal "a" which appears to be higher than a voltage U3 at terminal "b".

Claim 5 is amended to convey that the first terminal 24b receives first voltage (+5V) from chopper circuit 30 and not from fly-back circuit 24 (FIG. 1). Specifically, claim 5 is amended adding thereto:

"the first terminal receiving the first voltage from said chopper circuit and not from said fly-back circuit".

By so amending, independent claim 5 is patentably distinguished over Pries.

Reconsideration and withdrawal of this rejection are respectfully requested.

Claim Rejections under 35 USC §103

Claims 1-3 are rejected under 35 USC § 103(a) as being unpatentable over US Patent No. 4,608,625 (Josephson '625) in view of US Patent No. 5,523,665 (Deaver '665).

Claim 1 is amended to convey that the power-off signal is a signal for controlling stopping operations of the first circuit generating the positive polarity voltage and the second circuit generating the negative polarity voltage. An important difference between the present invention and Deaver is that the time it takes to stop the power source circuit and the discharge of the capacitor is shorter than that of Deaver. Specifically, claim 1 is amended adding thereto:

“wherein the power-off signal stops operation of the first circuit and the second circuit and discharges residual charges of the capacitor by said short circuit; and”

By so amending, the claimed invention is believed to be patentably distinguished over the asserted prior art. Reconsideration and withdrawal of this rejection are respectfully requested.

Claim 4 is rejected under 35 USC § 103(a) as being unpatentable over Josephson '625 in view of Deaver '665 and Preis '765.

Claim 4 is amended to convey that the first terminal 24b receives the first voltage (+5V) from the chopper circuit 30 and not from the fly-back circuit 24 (FIG. 1). Specifically, claim 4 is amended adding thereto

“the first output terminal of said positive polarity voltage outputting terminal receiving the first positive voltage from the chopper circuit and not from the fly-back circuit.”

By so amending, the claimed invention is believed to be patentably distinguished over the asserted prior art. Reconsideration and withdrawal of this rejection are respectfully requested.

Claim 6 is rejected under 35 USC § 103(a) as being unpatentable over US Patent No. 4,802,739 (Iwamoto '739) in view of Japanese Application Number JP06152896 (Sawanobori '896) and US Patent No. 5,475,500 (Takeda '500).

Iwamoto '739 describes a liquid crystal display (LCD) control device having a voltage source 3, a capacitor C2, a switch SW5, a first terminal V_{DD} , and a second terminal V_{SS1} . Voltage source 3 outputs a +5V to V_{DD} and a -5V to V_{SS1} . Switch SW5 closes to discharge capacitor C2 and to connect terminals V_{DD} and V_{SS1} (FIG. 1; col. 3, lines 10-14).

Sawanobori '896 describes a voltage controller for a charge coupled device (CCD) 15. The CCD 15 receives +15V and -9V, and the discharge circuit 18 discharges the -9V supply line S3 (FIG. 1). Takeda '500 describes a printer. At step S9, a microcomputer 16 checks if a power off command is supplied (FIG. 7B; col. 7, lines 63-65).

The Office proposed combination of references is unreasonable, because it is unobvious for a person to combine an LCD control device (Iwamoto '739), a voltage controller for a CCD (Sawanobori '896), and a printer (Takeda '500).

Reconsideration and withdrawal of this rejection are respectfully requested.

Claim 7 is rejected under 35 USC § 103(a) as being unpatentable over Sawanobori '896 in view of Josephson '625 and Preis '765.

Claim 7 is amended to include the first terminal 24b receiving first voltage (+5V) from chopper circuit 30 and not from fly- back circuit 24 (FIG. 1).

Also, claim 7 sets a forth chopper circuit generating a low first positive voltage, a flyback circuit generating a second high negative voltage, a first terminal outputting the first low positive voltage, a second terminal outputting the second high negative voltage, and a diode positioned "in a forward direction from said first terminal to said second terminal".

By so amending, the claimed invention is believed to be patentably distinguished over the asserted prior art. Reconsideration and withdrawal of this rejection are respectfully requested.

Claim 8 is rejected under 35 USC § 103(a) as being unpatentable over Josephson '625 in view of Deaver '665 and Preis '765.

Claim 8 is amended to include the fact that the first terminal 24b receives the first voltage (+5V) from the chopper circuit 30 and not from the fly-back circuit 24 (FIG. 1). In line 16 of claim 8, the claim language is clarified by changing "direction of from" to --direction from--, please inform us.

By so amending, the claimed invention is believed to be patentably distinguished over the asserted prior art. Reconsideration and withdrawal of this rejection are respectfully requested.

CONCLUSION

In view of the aforementioned amendments and accompanying remarks, all pending claims are believed to be in condition for allowance, which action, at an early date, is requested.

In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 50-2866.

Respectfully Submitted,

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